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**REMARKS**

Claims 1-41 are pending in the application. Claims 1, 9, 15, 21, 27, and 35 are independent claims.

Claim 16 has been objected to as being in improper dependent form. In response, claim 16 has been amended to depend on claim 15.

Claims 17, 23, and 28 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite because of the use of the term "dependencies" in these claims. In response, it is respectfully submitted that the term "dependencies" is not to be interpreted as set forth by the examiner, rather, it is to be interpreted as it would be by those skilled in the art. See Hennessey and Patterson, Computer Architecture A Quantitative Approach, Morgan Kaufmann Publishers, Inc., San Mateo, California, 1990, chapter 6, ("Hennessey") for a discussion of hazards and dependences (each synonymous with the term "dependencies") in pipelined processors.

Claims 25 and 26 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite because of the use of the terms "substantially" and "approximately" in these claims. In response, claims 25 and 26 have been amended to delete these terms.

Claims 1-13, 15-24, and 27-40 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,491,752 ("Kaufman"). Claims 14, 25, 26, and 41 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kaufman.

In making these rejections, the examiner appears to be equating a distributed computing system to a pipelined processor. It is respectfully submitted that a distributed computing system is not synonymous with a pipelined processor. See Hennessey for a discussion of pipelined processors.

Regarding independent claim 1, the examiner argues that Kaufman discloses a processor comprising a plurality of pipeline stages to perform an inner loop of a hash algorithm. In response, it is argued that Kaufman does not include any reference to

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pipeline stages, and therefore cannot disclose a processor comprising a plurality of pipeline stages to perform an inner loop of a hash algorithm.

Regarding independent claim 9, the examiner argues that Kaufman discloses an apparatus comprising a plurality of pipeline stages to perform a hash. In response, it is argued that Kaufman does not include any reference to pipeline stages, and therefore cannot disclose an apparatus comprising a plurality of pipeline stages to perform a hash.

Regarding independent claim 15, the examiner argues that Kaufman discloses a method comprising performing a plurality of iterations of an inner loop of a hash algorithm in parallel, the plurality of iterations limited by dependencies between each of the plurality of iterations of the inner loop. In response, it is argued that Kaufman does not include any reference to performing a plurality of iterations of an inner loop of a hash algorithm in parallel, and therefore cannot disclose a method comprising performing a plurality of iterations of an inner loop of a hash algorithm in parallel, the plurality of iterations limited by dependencies between each of the plurality of iterations of the inner loop.

Regarding independent claim 21, the examiner argues that Kaufman discloses a method comprising performing a hash algorithm within a pipelined processor by performing a plurality of iterations of an inner loop of the hash algorithm in parallel. In response, it is argued that Kaufman does not include any reference to performing a hash algorithm within a pipelined processor by performing a plurality of iterations of an inner loop of the hash algorithm in parallel, and therefore cannot disclose a method comprising performing a hash algorithm within a pipelined processor by performing a plurality of iterations of an inner loop of the hash algorithm in parallel.

Regarding independent claim 27, the examiner argues that Kaufman discloses a system comprising a pipelined processor to perform the operations of a hash algorithm by performing iterations of an inner loop of the hash algorithm within separate pipeline stages of the pipelined processor. In response, it is argued that Kaufman does not include any reference to performing iterations of an inner loop of the hash algorithm within separate pipeline stages of the pipelined processor, and therefore cannot disclose a system comprising a pipelined processor to perform the operations of a hash algorithm by

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performing iterations of an inner loop of the hash algorithm within separate pipeline stages of the pipelined processor.

Regarding independent claim 35, the examiner argues that Kaufman discloses an apparatus comprising execution means for performing iterations of an inner loop of a hash algorithm in parallel. In response, it is argued that Kaufman does not include any reference to performing iterations of an inner loop of a hash algorithm in parallel, and therefore cannot disclose an apparatus comprising execution means for performing iterations of an inner loop of a hash algorithm in parallel.

Each of the independent claims includes at least one limitation not disclosed by Kaufman. Therefore, each of the dependent claims also includes at least one limitation not disclosed by Kaufman. Based at least on the above arguments, the rejections of claims 1-41 based on Kaufman is improper.

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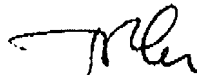
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**CONCLUSION**

Based on the foregoing, it is respectfully submitted that the rejections of claims 1-41 have been overcome, and that claims 1-41 are in condition for allowance. The applicant therefore respectfully requests the issuance of a Notice of Allowance. Please charge any necessary fees to our Deposit Account No. 50-0221.

Respectfully submitted,

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